



Education and Social Sciences Advanced Research Methods (ARM) – Certificate

Overview

The Advanced Research Methods (ARM) Certificate is a stand-alone graduate-level certificate in Education & Social Sciences Advanced Research Methods (ARM), offered by the School of Education and Human Development at Texas A&M University. The program allows graduate and non-degree seeking students the opportunity to gain additional training in research methodology, and to obtain academic validation for their efforts. The Certificate testifies to a student's successful mastery of advanced competencies in education and social sciences research methods, with emphasis on quantitative or qualitative approaches. The ARM certificate facilitates students' initiation into the academic publication process, and allows them to become more 'marketable' in today's competitive hiring practices, especially in the context of Research Universities with Very High Research Activity.

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Certificate Eligibility: Who can obtain the ARM Certificate?

- Graduate students in all departments within SEHD
- Graduate students in all departments outside of SEHD, at Texas A&M University who wish to add to their social science research training, or
- Non-degree seeking students (e.g. professionals in the Bryan/College Station community) who wish to improve their research skills.

Non-degree Seeking Student Application Requirements

- You must have an undergraduate or graduate degree in any field of study from an accredited college or university.
- Complete an Apply Texas Graduate Application and submit application fee (\$50 Domestic, \$75 International). More information can be found here <http://admissions.tamu.edu/graduate/apply>.
- The Spring application deadline is October 15. Summer and Fall application deadlines are April 15.
- Submit official college transcripts from each institution attended, which must be received by application deadline date.
- Submit a professional resume or curricula vitae along with your application.

Certificate Requirements

- Complete four (4) approved advanced research methods courses, totaling 12-credit hours with a passing grade of *A, B, or S*.
- Engage in research, either one's own study, or as part of a research team. The research study must utilize one or more methods gained from coursework. While what constitutes as research-based reporting may vary across fields, journal articles formatted as commentaries, letters-to-the-editor, teaching tips, or nonsystematic reviews of the literature are not eligible to fulfill the journal article submission requirement. Additionally, book chapters will not be accepted. Systematic literature reviews and meta-analyses do count, however. The submitted article can come from the student's thesis or dissertation, or a paper written for a class. Provide evidence of submission for publication in a peer-reviewed journal, in which the student is listed as an author. A copy of the published article that meets the above criteria will also suffice.
- Write an integrative reflection essay (see section below).
- Students will submit a Certificate portfolio and submit it along with their ARM Application (See Appendix B) once they have satisfied coursework and manuscript requirements.

Certificate Application Process

1. Express your intent to pursue the certificate with your committee chair (if applicable) and graduate advisor. Ensure coursework can be included in your existing degree plan.
2. Complete the ARM Intent Form (See Appendix A).
3. Complete all certificate requirements.
4. Submit a completed ARM Application Form (See Appendix B) and Student Research Portfolio in one document.

Integrative Reflection Essay

Reflect on the research manuscript you submitted for publication. Briefly describe your research in lay terms. What knowledge, skills, and competencies from the certificate courses did you apply to the research

manuscript? Refer to a specific page number in your manuscript that outlines the use of said skills. How will those knowledge, skills, and competencies be helpful beyond your current academic program?

Format: The reflection should be a maximum of two-pages, 12-point font, double-spaced.

Certificate Policies

- Students may complete any approved courses of their own choosing. It is the student's responsibility to verify course availability prior to planned enrollment.
- Students are allowed to apply for the certificate before, while in progress, or after completing coursework.
- Students must perform at a satisfactory level in all research methods courses; grades lower than a *B* and (*U* grades) will not be accepted for certificate courses.
- Enrollment in the advanced courses will require the completion of established prerequisites where applicable (designated in the *Texas A&M University Graduate and Professional Catalog*) and/or the approval of the course instructor and the student's dissertation committee chair/faculty advisor.
- Students must complete **at least three** (3) of the four courses in a face-to-face delivery format. Students are only allowed to complete a maximum of **one** three-credit hour course in an online delivery format.
- Under rare circumstances, students may petition the SEHD Graduate Instruction Council to take a course not listed above to suffice ARM requirements. **Prior to** planned course enrollment, students must receive approval from the SEHD Graduate Instruction Committee, which deems whether a request is considered an **advanced** research methods course. The committee will not consider course requests while a student is currently enrolled in the course or after the student has completed the course. This policy applies to courses at TAMU that are outside of SEHD and courses external of the university.

Student Certificate Portfolio

- A copy of the manuscript of original research in which the student is listed **as an author**. The manuscript **must** use elements of methodological processes gained from **one or more** of the courses taken for the ARM certificate. While what constitutes as research-based reporting may vary across fields, journal articles formatted as commentaries, letters-to-the-editor, teaching tips, or non-systematic reviews of the literature are **not** eligible to fulfill the ARM journal article submission requirement. Additionally, book chapters will not be accepted. Systematic literature reviews and meta-analyses do count, however. The submitted article can come from the student's thesis or dissertation, or a paper written for class.
- Evidence that the manuscript was submitted for review to a peer-reviewed journal. Acceptance for publication is **not** a requirement.
- Submit a **two (2) page**, double-spaced integrative reflection essay. See specific criteria below.
- Portfolio format includes:
 - Title page that includes name, college, department, program, and committee chair
 - Table of Contents
 - Manuscript submitted for publication
 - Evidence of journal submission
 - Two page reflective essay
- The portfolio will be scored using the Advanced Research Methods Certificate Rubric. (See Appendix C).
- Students will submit their portfolio along with an ARM application.

Advanced Research Methods (ARM) – Certificate Approved Courses* ⁺

Educational Administration and Human Resource Development

EDAD 623	Advanced Fieldwork Methods	3
EHRD 656	Narrative Analysis	3
EHRD 657	Life History Research	3

Educational Psychology

EPSY 625	Advanced Psychometric Theory	3
EPSY 637	Grounded Theory Methodology	3
EPSY 642	Meta-Analysis of Behavioral Research	3
EPSY 643	Applied Multivariate Methods	3
EPSY 650	Multiple Regression and Other Linear Models in Education Research	3
EPSY 651	Theory of Structural Equation Modeling	3
EPSY 652	Theory of hierarchical Linear Models	3
EPSY 653	Advanced Structural Equation Modeling	3
EPSY 654	Longitudinal Data Analysis	3
EPSY 655	Item Response Theory	3
EPSY 661	Data Analysis for Single-Case Experimental Design in Educational Research	3
EPSY 656	Survey Instrument Development	3

Teaching, Learning, and Culture

EDCI 627	Teaching and Learning Data Analysis and Uncertainty Concepts	3
EDCI 628	Analyzing and Reporting Field Based Research	3
EDCI 661	Mixed Methods Research in Curriculum and Instruction	3
EDCI 688	Research Methods in EDCI III	3
EDCI 706	Narrative Inquiry in Curriculum and Instruction I	3
EDCI 707	Narrative Inquiry in Curriculum and Instruction II	3

*Under rare circumstances, students may petition the SEHD Graduate Instruction Council to take a course not listed above to suffice ARM requirements. **Prior to** planned course enrollment, students must receive approval from the SEHD Graduate Instruction Committee, which deems whether a request is considered an **advanced** research methods course. The committee will not consider course requests while a student is currently enrolled in the course or after the student has completed the course. This policy applies to courses at TAMU that are outside of SEHD and courses external of the university.

⁺ Students must complete **at least three** of the four courses in a face-to-face delivery format. Students are only allowed to complete a maximum of **one** three-credit hour course in an online delivery format.

Appendix A
Graduate Certificate in Education & Social Sciences Advanced Research Methods
Intent Form

This form is for students who have an interest in completing the SEHD Graduate Certificate in Education & Social Sciences Advanced Research Methods. In consultation with your committee chair (if applicable) and graduate advisor, discuss and select **four (4)** additional research methods courses for 12-credit hours total to be included in your degree plan. It is the student's responsibility to verify course availability the semester prior to enrollment.

[Click here to complete the electronic ARM Intent Form.](#)

Or copy and paste the link into your browser:
https://tamucehd.qualtrics.com/jfe/form/SV_doOGKTbvCoFE817

Appendix B

Graduate Certificate in Education & Social Sciences Advanced Research Methods Application

Name:	Date:
College:	Department:
Student Type (Circle One): Master's, Doctoral, Nondegree seeking (G6)	UIN:
Graduate Advisor Name & Email:	

COURSES TAKEN TO SATISFY CERTIFICATE REQUIREMENTS*				
Semester/Year	Course Name	Course Title	Credits	Grade

*Required: 12 credit hours of advanced-level research methods courses with grades A, B or S.

Please attach your Research Portfolio, which includes:

- Title page that includes name, college, department, program, committee chair
- Table of Contents
 - Manuscript submitted for publication
 - Evidence of journal submission (publication is not required)
 - Two page reflective essay

Please refer to the Advanced Research Methods Certificate Overview for more details on portfolio contents.

Needed Approval Signatures

Graduate Advisor:	Date:
Committee Chair:	Date:

FOR USE BY ASSOCIATE DEAN OF ACADEMIC AFFAIRS OFFICE ONLY

Portfolio Completion Status: <input type="checkbox"/> Submitted, Complete. <input type="checkbox"/> Submitted, Incomplete. <input type="checkbox"/> Not Submitted. <input type="checkbox"/> Domain 3 _____	Portfolio Rubric Score**: <input type="checkbox"/> Domain 1 _____ <input type="checkbox"/> Domain 2 _____
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Senior Assoc. Dean for Academic Affairs (signature)

Date: _____

Electronic Filing Date: _____

UAS Submission Date: _____

Appendix C

Advanced Research Methods Certificate Portfolio Rubric

Student Name: _____

Student UIN: _____

Students must score a one (1) or above **in each** rubric category to earn the certificate.

	Exceed Expectations (2)	Meets Expectations (1)	Does Not Meet Expectations (0)	Total
Research Manuscript Student adapts and applies ability, skills, knowledge, and competencies gained from ARM coursework into research manuscript.	Student adapts and applies skills, abilities, knowledge, and competencies from two or more ARM certificate courses in submitted manuscript.	Student adapts and applies skills, abilities, knowledge, and competencies from at least one ARM certificate course in submitted manuscript.	Student does not adapt and apply skills, abilities, knowledge, and competencies from at least one ARM certificate course in submitted manuscript.	
Design Process¹ Methodological design process of manuscript.	High quality, creative, study design that demonstrates manifests a deep understanding of the methodology; clear explanation of methodological choices, iteratively explores questions raised by the data or theoretical analysis; Discussion of connection between methodology and data analysis clearly and concisely .	Appropriate methodology and study design; Discussion of connection between methodology and proposed data analysis is clear and concise.	Shows basic competence in understanding methodology and study design; connection between the methodology and the proposed data analysis discussed may not be clearly developed.	
Reflection² Student reflects on experience completing the certificate, examining in what ways it enhanced growth and development beyond current academic program.	Student reviews prior learning experiences in depth to reveal significantly changed perspectives about educational experiences, knowledge and growth over time.	Student reviews prior learning experiences with some depth , revealing clarified meaning or indicating a somewhat broader perspective about educational experiences, knowledge and growth over time.	Student does not review prior learning experiences, or reviews them at a surface level , without revealing clarifying meaning or indicating a broader perspective about educational experiences, knowledge and growth over time. OR Reflection is not included.	
Total				

Comments:

¹ Adapted from Chapman University Attallah College of Educational Studies Dissertation Rubric ²

Domain description adapted from AAC&U Foundation and Skills for Lifelong Learning Value Rubric.